INDUSTRIAL EDUCATION

Report of the

Committee on Industrial Education

H. E. MILES, Chairman

AT THE

Twenty-first Annual Convention

OF THE

National Association of Manufacturers

NEW YORK CITY
MAY 15, 1916

Issued from the Secretary's Office, 30 Church Street,
New York City

REPORT OF COMMITTEE
ON

INDUSTRIAL EDUCATION

"What you would find in a people, you must first put into its schools."—Humboldt.

"The nation that has the schools has the trade."—Bismarck.

When asked, 3,000 years ago, "What shall we teach the youth?" a Spartan king replied, "Teach them what they will do when they are men."

The school year just ending has been fraught with much of interest in the furtherance of vocational education. Widespread consideration has developed a common judgment.

No longer is there fear that these schools, under public and practical direction, will be inconsiderate of spiritual values. A mechanic will not be injured spiritually or socially by training that makes him a better mechanic. He might be injured in many ways by vocational training that failed to meet his occupational needs.

The members of a vocational school board need not be any less cultural, patriotic or wisely idealistic because each has had a lifelong experience in manufacturing or commerce. A board without such experience cannot succeed because "They know not what they do."

A Representative Control

The study of the Smith-Hughes bill for Federal Aid for Vocational Education has brought all the organizations to which Congress will quickest look, to insist upon this representative and co-operative control and direction, including the Chamber of Commerce of the U. S. A., the Division of Superintendents* of the National Education Association, the American Federation of Labor, the National Society for the Promotion of Industrial Education, the American Home Economics Association, the International Association of Master Painters and Decorators and the National Association of Manufacturers.

It is a satisfaction to know that our organization was the first to advance this principle of representative control as of prime necessity, proven so by generations of experience in the foremost industrial nations of the world, largely productive of German efficiency, and of the spirit, happiness and the wealth of Republican France, of Belgium and of Holland, Denmark and Austria.

---

* Voted at their Detroit meeting January last, with 5000 State and City School Superintendents in attendance.

The National Chamber of Commerce includes over seven hundred commercial organizations representative of every State and Territory, and 300,000 firms and corporations. Our organization fairly represents the manufacturers in this matter and their desire to make all fair and necessary contributions by way of business adjustments.

We may also contemplate with satisfaction, the attitude of the American Federation of Labor upon Industrial Education. Its position is substantially identical with our own. Its president, addressing the chairman of the Committee on Education of the United States Senate, on hearing the statement of the representative of the National Association of Manufacturers, said, "That is exactly what I would say." Both these organizations hold with the National Chamber of Commerce that any Bill that would fail to establish a Federal Board representative of the interests especially involved, should not be permitted to become law. They are confident that the public judgment is now so confirmed in this respect, that if the Congress by any chance fails so to provide, a later Congress will.

Federal Aid for Vocational Education

Amend the Smith-Hughes Bill

These organizations, with others, are urging an amendment to Sec. 6 of the House Bill (H. 11250) and of the Senate Bill (S. 703) to wit:

"That the Federal Board for Vocational Education is hereby created, to consist of five citizens of the United States, four of whom shall be appointed by the President. One of these men shall be an employer of labor engaged in manufacturing; one an employer engaged in commercial pursuits other than manufacturing; one a representative of labor; and one a person engaged in agriculture. The Commissioner of Education shall be a member of the Board. The Board shall elect annually one of its members as Chairman."

There is much reason to believe that Senator Hoke Smith, chairman, Senator Page and others of the Senate Committee, look with favor upon this proposal.

Action is probable within a few days upon these bills and letters from our members and others to members of Congress may be of the greatest assistance. The Bill gives about $1,000,000 next year, and the amount rises rapidly to $7,000,000 per annum, on condition that the States spend a like sum. It will accomplish much if wisely used and may be undesirable if unwisely used. Of the $7,000,000 there is given for agriculture $3,000,000, for industries and commerce $3,000,000 and for training teachers $1,000,000.

Federal Guidance Needed More than Money

As President Wilson said last January, "We ought to have a great system of industrial and vocational education under *Fed-*

eral guidance and with Federal aid." Money is of minor consequence except as it supports and dignifies the Federal guidance; brains, not money; brains fused in the hot furnace of deep and inclusive experience.

The question is not one of education only, but of education *plus* industry. One cannot teach what he does not know. The Federal Board must know, in the only way possible, the way of vital life experience, what are the needs, the aspirations and the hopes of industry in both the field of labor and of management. It must have even that "sixth sense" which weighs the inarticulate and makes it articulate. Millions of students must be summoned from the work places in office and store, in shop and street, each to be advanced by this schooling from whatever is his present place to the next better, and the next. The board will succeed in geometric proportion as it answers, through the depths of experience, to the experiences and the hopes of the millions to be taught.

This requires, for instance, that there be upon the Federal Board a well chosen manufacturer who will express the judgment and experience of his kind; and another from commerce, other than manufacturing; one of labor; and one from agriculture; with the Commissioner of Education *ex officio* for evident reasons. No one should be forced upon such a board as its chairman or its executive officer. The board will know whom to choose upon mature consideration.

Compulsory School Attendance

Some may not realize that there is close behind this Bill, something very different from a mere invitation to partake of vocational instruction. Almost immediately, upon the action of the States of course, there will be force back of this Bill, as in Wisconsin, Pennsylvania, and in a measure, in several other States.

Everyone is realizing and agreeing that every youthful industrial worker under sixteen as in Pennsylvania, or seventeen, as in Wisconsin, or possibly eighteen, must be required by State legislation to go to a vocational school a certain number of hours each week for instruction in his occupation or a better one if need be. America will not longer waste the child life of the nation nor leave little children to battle alone in industry against the world. Compulsory part-time school attendance for young workers during working hours is, in fact, only a broad social recognition of the right of the child to efficient, vital training in the pathways of life which each must tread, and that recognition expressed in terms of agreement and action. Without compulsion, there has been no measurable success anywhere. Children come to these schools inversely as their needs. A few choice employers assist. The inconsiderate, or mean employer, never does.

Extend the Principle of Representative Government

The principle of representative government should be extended administratively. We call ours a Representative Government. Legislatively it is so—even in its defects. Administratively it must become much more representative. Bismarck wonderfully furthered this development when, some twenty-seven years ago, he socialized and democratized, as it were, Industrial Education in Germany by making its administration thoroughly representative. Said he in effect to the school people, "You have done well, but not well enough. I now turn the vocational schools over to the employers and skilled wage earners of the nation." From that time industry, labor and education have been one in the common endeavor. The best of each has been given to all and the civic and industrial intelligence of the nation has advanced by leaps and bounds.

Ask one of the thousands of German banks if they are under governmental control, and the answer will come, in effect: "No indeed. We wouldn't stand for governmental control. The government can't run banks. It doesn't know how." Ask if they are run without control from outside, the answer comes: "All our banks are under a common control in the interest of ourselves and the public. In our associations of bankers we have committees with authority and experience, who see that every bank is right or goes out of business. The government requires this."

The former chairman of our Committee on Accident Prevention, Mr. F. C. Schwedtman, sat, upon invitation, with a German court for the adjudication of accident cases. From 35 to 40 cases, some of them very serious, were settled in a day of seven hours to the satisfaction of all parties. And why? Because the court consisted of one lawyer (as President), two employers and two wage earners. Every interest was well represented before the court and still better in the court itself in its lifelong experiences and appreciations. The costs were negligible.

The Smith-Hughes Bill may be the first to bring together in mighty co-operative, administrative accomplishment the great forces from which the nation draws its life—agriculture, labor, commerce.

Federal Advisory Committees

He who sees vocational education only in the lump as a big and simple thing does not see it at all. Or he sees it as one sees a city in the farthest distance, dim and dull. It is one thing to develop educational processes for plumbers; it is quite another thing for master carpenters; and again very different for textiles or salesmanship. Success in each direction will be in geometric proportion as committees representative of the employers and wage earners in each occupation directly participate in the de-

termination of the major educational and trade requirements. This is illustrated in the foremost city in the world in the training of its workers, Munich, Bavaria, where twenty-three representatives of the local occupations constitute the Board of Vocational Education with the burgomaster and the city superintendent of schools *ex officio* members, and with further advisory committees in the respective trades. Says Doctor Kerschensteiner, the superintendent, "I could not get along any other way." This personnel causes each local occupation, fifty in all, to be taught with a particularity and intensiveness that makes the city lead in its industries in all the markets of the world. So the board in Crefeld, Germany, contains eighteen men from almost as many occupations with the same *ex officio* members. This is the common practice in Europe where the local boards are under the Department of Industry and not of Education—a principle which we recognized recently in placing the appropriations of the Lever Law and its execution in our agricultural department.

Some may feel that any Federal board would naturally have these advisory committees, but the present bills neither provide for them nor for the payment of their necessary traveling expenses, etc., as they should.

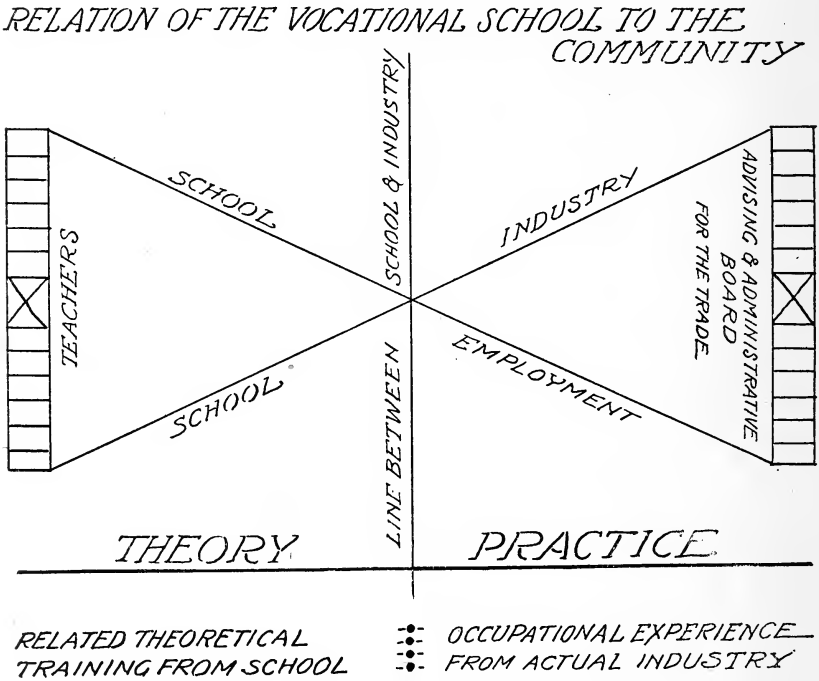
Also, it is a strange tendency of human nature once put in authority to be self-satisfied and hesitate to seek advice from other than subordinates. One very great industrial State provides for advisory committees to its State board but does not require the board to consult such committees. A committee member says that in four years he has never been asked a major question. The State is very rich, very great in manufacturing, and yet for want of thorough-going correlation in each particular major occupation, its vocational education is negligible, and in many respects abominable. The Federal advisory committees should not be permanent but should act only upon fair necessity at the cost of their actual expenses. One such committee in each trade will save much of the expense of forty-nine other committees in several States, committees disassociated, each duplicating the work of all the rest. Half of the value of the law lies in the service of the representative board and advisory committees.

It may be said that there should be more educators on the Federal Board. But the board will be surrounded with educators in such numbers as necessarily gives them tremendous influence.

Old Complaint Still Prevalent—For Lack of Practical Direction

Twenty years ago the same general arguments were made as now for the vocational training of those who must live by the occupations in success or failure, in happiness or disappointment. Millions have been spent meantime and almost everywhere there is the same outcry and disappointment as before,

chiefly because the control has not been representative and the schools not correlated with industry. For instance, a vocational high school costing hundreds of thousands of dollars, in a great industrial city, is giving four years of instruction in the usual school courses in woodworking, metal, etc., for only 950 hours per year. Nearby is a great manufactory of astronomical and other instruments. Its management is high-minded and generous. Says a shop director, "We will not give a week's credit against his three years of apprenticeship to a graduate of this vocational school. He would be no better for us than a bright boy



right from the street." What a crime, educationally, against the boy graduate! What a murder of his high and worthy expectations, wrongly developed through four trusting and potentially invaluable years. The school might have fitted him splendidly in two years instead of spoiling him in four. A wretched use of the tax money of a patient community. The employer says he can't afford to "unlearn" these boys. He shows his good faith and his belief in training, by establishing a school in his own shop at large expense and paying his apprentices wages during the hours of instruction.

By contrast, consider the White Adding Machine Company of New Haven, which is employing fourteen and fifteen-year boys at 7½c. per hour—not a bad price for inexperienced children, along with a good chance. But the company pays the same rate alternate weeks when the boys are in a nearby industrial school and not working for it at all. This makes each hour of actual employment cost 15 cents. Their school instruction is directly and particularly related to their shop tasks which are progressively arranged. When some of your committee visited the shops, these boys were doing work for which the company usually paid 30c. an hour—not doing it so fast but fast enough to relieve everyone of any taint of charity or dependence. Everyone was profiting and satisfied. The only criticism of the superintendent was that he had only a few of these boys and wanted fifty.

At the end of one year these boys work continuously in the factory at 20 cents an hour, and schooling is carefully provided evenings for those who want it.

To the same school were going adult mechanics from this shop and a graduate from a technical college to pick up threads he had missed in college.

We quote from a report from one of its experts to the Wisconsin State Board of Industrial Education, which is representative in its personnel and seeks to secure full correlation between the schools and industries.

"In one city it was found that a group of boys employed in a tannery were attending a continuation school and making 'projects' in a woodworking shop.

When asked about the school the tanner replied: 'It is good for a school, but why should my boys study woodworking?'

Why cannot a school be established in the tannery and have the group of boys study a program as follows, permitting the teacher to give instruction right in the factory?

Monday—First hour of working day—practical mathematics related to the trade.

Tuesday—Same hour—the tannery business, one department and process after another taught by one of the tannery men.

Wednesday—Same hour—English and related subjects reviewing their tannery instruction.

Thursday—Same hour—Tannery business and appliances.

Friday—Same hour—Civil Government.

These boys have no use for woodworking and drafting related to the woodworking trade. It was found that the tannery was at a great loss for 'all around' men, while the present employment conditions are such that the boy has no opportunity to learn the business.

"When the superintendent of the factory was interviewed by the writer regarding the advisability of working out such a plan, he replied that he would be only too glad to co-operate in such a scheme. Further he said, 'We hope to enlarge and expand our business, but we cannot find men properly trained to do it. This plan would provide so that the boy would learn the business right in the factory, while the instruction would cover the theoretical training which the factory employment can never give him."

It is estimated that this sort of shop school would cost the city about three cents per pupil hour against from nine to twelve

cents in the public school besides giving the pupil a superior instruction that he could not otherwise get.

In another city the local board is endeavoring to establish a part-time school in a factory taught by practical teachers, some of them engaged by the city for part-time instruction from the shop itself. The employer is to give those in his employ under eighteen, one-half day's instruction per week. The school will be open for adults in the evening. The studies would consist of practical mathematics, related drafting, applied mechanics, English, citizenship and geography from the standpoint of the industry. There are such schools now in successful operation.

Said a foreman, pointing to a row of drill-press men: "They always used to quarrel for increases in wages. I finally said to them, 'Confound you, if you want more wages you must know something.' They entered a public night school, soon got a raise and we were all satisfied." It was an exceptional school. It was correlated with the industries.

Schools and classes can only be provided in factories where the number of pupils justifies. The especial advantage to the city is in the saving of plant and running expenses and in securing technical or well correlated instruction from shop experts who could not well leave the premises.

Often a factory is glad to give or lend special machinery to a city school for the instruction of prospective employees. A glove factory is lending sewing machines with motor power to a sewing school whose graduates, on entering the glove factory, have often broken down under the strain of power machines and the unaccustomed pressure and excitement of shop production.

Many employments must be taught in each community and, contrary to convenience, relatively more occupations, population considered, must be taught in small communities than in big ones. Sometimes these small towns can be grouped and a single high-class instructor can teach a difficult subject or trade in several nearby towns better than for each town to have a separate and probably poorer instructor at more cost than a proportionate contribution to the salary of a single superior person.

Manual Training

Manual training as it has been developed or mis-developed in the United States is nondescript. It fits for nothing. In the elementary schools it is of much the same value as a month's course in botany to a sailor. It might lead to something, but it doesn't. Children do not commonly go from the manual training schools into the industries. They go to college.

Says a national authority, "I'll take you through all the manual training schools in this great city, and we won't find a set of tools fit for a mechanic to use.

The trouble is due to lack of correlation with the world of real work.

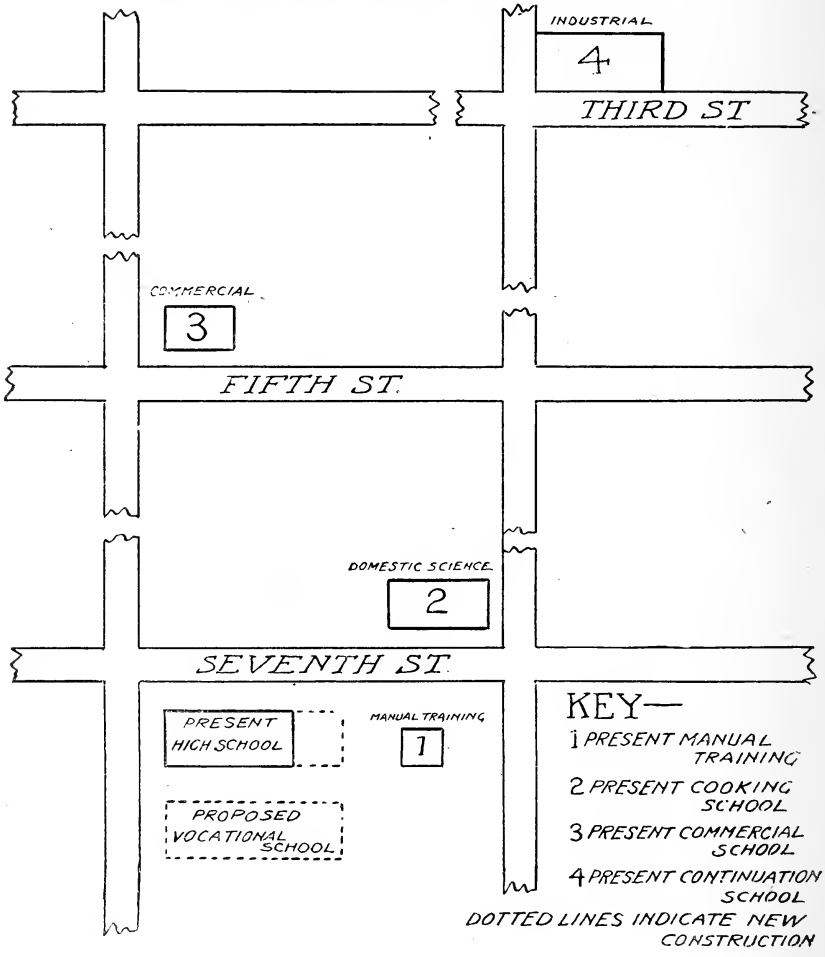
Manual training as it ought to be, as it will sometime be in this country—the sooner the better—and as it is to the greatest advantage in Europe, in Munich for instance, is vocational training and nothing else, training in the various occupations, given with intelligent regard to the larger correlations. Says Dr. Kerschensteiner of Munich, in substance, "How can you make any difference between manual training and vocational training? In both the same machines are used. The materials are the same and the products." It is pure fad and ignorance that seeks to keep manual training a thing apart, 'purely cultural' (if we may be pardoned this wretched term). Shall we spend as much as we can and teach as little as we can? Our present manual training is for those who will never work with their hands. Is there any experience more worth while in later years for such persons than that to be gained only by their living in the vocational schools the life of their more numerous brothers who do live by manual toil? Have Little Rich Boy and Little Blue Jeans work together in the vocational school as in other schools, to the end that they develop better understandings and friendships for the years to come.

This is the practice in New Haven as described in the report of this committee last year. Of the hundreds of experts who have visited that school we know of none who would recommend otherwise.

We illustrate on the following pages the situation as respects manual training and industrial training in three cities, each different, each wasteful of money and deficient in educational quality for reasons inherent in the separation of these activities. Each of these cities has been successful in many respects. The suggestions here offered are accompanied with high appreciation and only for purposes of happy development.

Congratulations that the city first shown has used temporary quarters while rapidly extending vocational education and has not too soon fastened her feet in brick and mortar. She has come to serve over 2,000 of her working people. She can now act with ample knowledge and experience.

It is costing her $55,000 annually to maintain manual and vocational training in four buildings, Nos. 1-4 in the Chart, page 10. The waste is excessive. For instance, a well-paid instructor may have a class of eight in the manual training building and another more highly paid instructor have a similar half-sized class at the same hour in the industrial school. In the commercial school the bookkeeping is imitative, that is—is not the keeping of real accounts. Perchance in one school a class lacks for equipment at an hour when the equipment needed is idle in another school. Again a class of eight or ten may be too ill assorted in the abilities of the pupils to permit of specialized instruction befitting each one; some may be butcher boys; one a grocer's; some from a plow shop and others from a trunk fac-

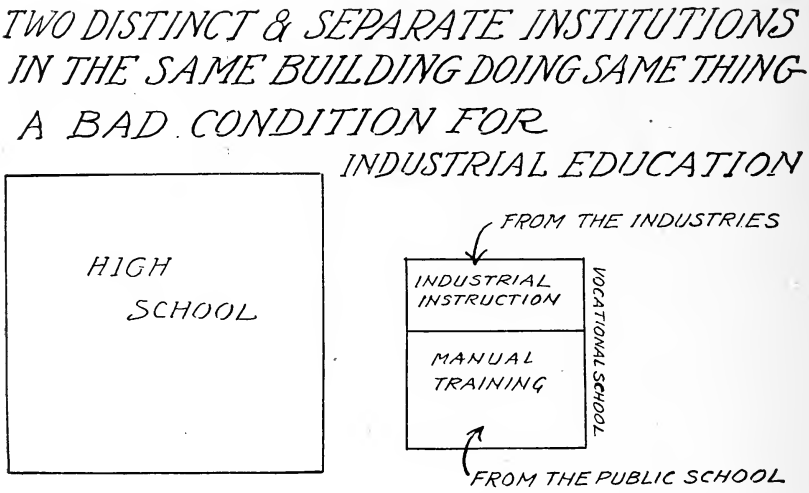

A RACINE, WIS. SCHOOL PROBLEM
INDUSTRIAL
4
THIRD ST
COMMERCIAL
3
FIFTH ST.
DOMESTIC SCIENCE
2
SEVENTH ST.
PRESENT HIGH SCHOOL
MANUAL TRAINING
1
PROPOSED VOCATIONAL SCHOOL
KEY—
1 PRESENT MANUAL TRAINING
2 PRESENT COOKING SCHOOL
3 PRESENT COMMERCIAL SCHOOL
4 PRESENT CONTINUATION SCHOOL
DOTTED LINES INDICATE NEW CONSTRUCTION

tory. Unite these schools, bring the 2,000 pupils of the industrial schools and a thousand manual training and commercial pupils together—keep all the teachers busy during all school hours, with the classes fairly full and the saving in money would be from 30 to 40 per cent. of the $55,000 now spent. The instruction would be improved beyond estimation by the larger opportunity to classify pupils and correlate with the several occupations.

Under the old thoughtless way of giving only 'the leavings' to that eighty or ninety per cent. of the people who quit school in their early teens and to spend vast sums on the few, fit and unfit, who strive for college and the professions, this city might spend, as has been suggested, $350,000 on a palatial new High School as a royal road to college for a very few, and then turn over the leavings, the old High School, to the little-regarded eighty or ninety per cent.

This city is typical of all the more exclusively industrial communities of America, great and small. She draws her strength from her industries, from her power through these industries to serve mankind and to reach out over the Earth for the trade thereof in manufactured necessities. Men, strong and admirable, have shaped themselves through the stress of these activities. By sharing in her life, men have risen to great positions in Commerce, in Washington and on the highest Courts. Character, power, beneficence, the best that man may wish for, have come of her travail. Is it conceivable that a city of this type upon which the whole nation must more and more depend for weal and woe, will long fail to train her people as adequately as possible for their respective occupations and for more and more convenient advancement in and through those occupations?

At a cost of about $75,000 this city can build alongside her high school, a vocational school where life will be made intelligent and inspiring to that great majority of her children who cannot or will not go to high school or college. With this new school she will meet her full obligation. The High School (extended and renovated at moderate expense, as happens to be necessary) will continue to be her highway to college and the professions. Her new vocational school will be the working boys' high school and later his technical institute or college. The whole social and productive life of the city will be elevated and democracy in education will advance the social and economic democracy that our fathers contemplated and which only now we find the means of developing.



This illustrates how one city is endeavoring to work out the plan. It points toward

1. **Social distinctions between the working children and those attending academic schools.**
2. **Duplication of**
   Teachers
   Materials
   Equipment
3. **Saving ⅓ of annual appropriations.**

Manual Training should become a part of the general scheme of Industrial Education, under one especially delegated authority or Board, representative of the occupations and interests of the community.

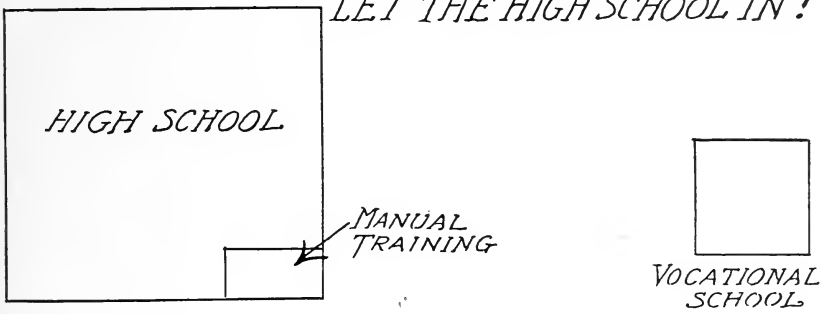
In the city shown above we have industrial training under one management and manual training under another in the same building, close by the High School, with duplication of expense and oversight.

The Money Waste

Public education has been too much a thing apart and unamenable to those rules whereby other public and private activities are measured and justified. It is time that the rule of money efficiency be set up against all public schools and that it be determined what may be required in return for public school expenditures which now aggregate in the United States nearly $600,000,000 annually.

This rule of money efficiency and return based upon dependable official records has recently been applied to a dozen towns and small cities, including three represented in the accompanying charts.

SEPARATE VOCATIONAL SCHOOL
WITH ITS DUPLICATION - A BAD CONDITION
LET THE HIGH SCHOOL IN!



In this city those in charge of the Industrial Education desire it to be entirely separate and not include the High School so-called Manual Training.

Much duplication of expense can be saved by bringing them more closely together and have the Industrial Education serve both purposes under a carefully selected board, representative of the occupations and interests of the community.

The Academic school children should not be deprived of the contact with real life and working conditions found in the practical representative school.

As respects teaching efficiency in these schools, the loss indicated, running from 35 to 46 per cent., implies no criticism of instructors because these losses inhere in the general feeling that when the public wants something there is no need of such serious study and procedure as will obtain the desired results economically.

A summary of ten cities shows as follows:

TYPE	Monthly Salary	Instruction Actual Pupil Hours per Week	Possible Pupil Hours per Week	Loss %
Industrial Schools	$3,437.70	11,004	*18,150	39
Manual Training	1,831.00	6,232	11,505	46
Combined Industrial and Manual	1,408.50	5,479	*8,400	35
	$6,677.20	22,715	38,055	

* Allows full time of director for supervision.

Says a State Director: "The above figures show that only two-thirds or less of the possible teaching time is being used. This is largely due to the small number of children to a class and a differentiation being made between industrial activities of the same kind for manual training on the one hand and the vocational school on the other."

"Because a sewing machine and a teacher of sewing is used for high school girls is no reason why the same teacher and the same machine cannot be used for teaching sewing to the continuation school girl."

"If they are united a large saving in salary and materials can be made **besides** bringing into our schools generally a large socializing influence which cannot be developed elsewhere through the teaching of the working girl or boy and the high school girl or boy in similar studies under similar conditions."

The above summary is on a basis of schools, as usual throughout the United States, running only 25 hours a week and only 950 hours a year.

But there are 8,760 hours in a year. Vocational schools should include Manual Training and run during the day time, eight hours a day, five and one-half days a week, and 50 weeks a year or 2,200 hours per year, being one-fourth of all the hours in the year. Working children are accustomed to these hours at less fortunate employment.

As President Eliot and other authorities affirm, vocational education offers such variety of experience and such exercise as not to fatigue. Innumerable children who cannot trifle through a school year of 950 hours, will happily avail themselves of the longer year of 2,200 hours which is easier than employment, is inspiring, doubles their earning power and gives them more schooling in two years than a High School in four years. We talk of wasted years. Two years saved in the teens may be as worth while as in later life. American children go to school less hours in the day, less days in the week, less weeks in the year, than the children of any other first-rate country.

And for how long will a big healthy body of public servants, our 400,000 school teachers, wish to work for only one-tenth of their time, 950 hours a year, with a little additional time given to preparation.

Nine hundred and fifty hours of strictly academic work is enough for little children but another hour or two can well be added in the common schools if devoted to vocational subjects which exercise the body and give the stimulation that play does.

Some of the best vocational schools are now running 2,200 hours per year day time very successfully.

In addition to the day period, good schools are open evenings for those who cannot attend during the day time, partly with supplementary teachers and with no one teaching beyond eight hours a day.

Surveys for Industrial Education

Investigations with recommendations like those charted above are made by experienced persons in from two to eight days at relatively no expense. Wherever made, they have been accepted by everyone with keen appreciation as offering

an ample basis for adequate and almost immediate action. In none of these cities has there developed any demand for different or more expensive surveys.

As was said to the Board of Education of New York City by its expert for vocational training, three-fourths of all the information needed for the development of Industrial Education in any community is immediately at hand ready for use. Said the President of a State Federation of Labor who participated in a $10,000 city survey: "It disclosed nothing that we did not know before."

An educator who is largely responsible for the schools of his city and for a "survey" of that city for Industrial Education, said, "The survey was worth $50,000." When asked how he found it so, he said for the following reasons:

(1) "We (presumably 'we local educators') *knew nothing about the laboring people and the laboring people knew nothing about us.* They had never had anyone talk with them about the schools and *we never talked with them. . . . . Nobody had the time to.*

(2) "Until the survey, *we really thought we needed a trade school.* The survey convinced us we did not, and so saved a probable investment of $200,000 in trade school. We have positively dropped this idea since the survey was made.

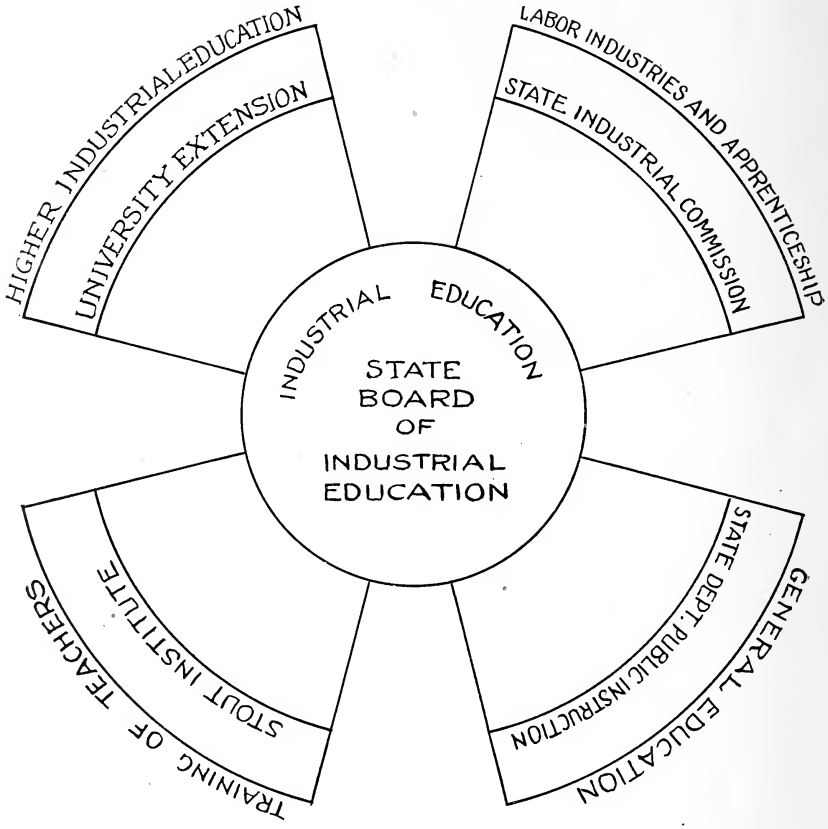
(3) "*It may have been very obvious* that we needed many trade extension classes, *but I will confess* that in the midst of administrative duties, *none of us thought of it.*

(4) "We have no real compulsory education in ———, our people have to be handled by moral suasion. The survey gave them a new light, *not so much by what was found out, as by the light that came* to the people *by being interested in questions relating to preparation for life's work.*"

In conclusion he says, "In many places *it would be a waste of money to conduct Surveys,* but I cannot say that that was the case with us."

The italics are ours. They disclose the situation. Vocational surveys, such as the country has been addicted to recently, are excusable mostly because, though wasteful, voluminous and repetitional, they open the eyes of school people to the existence of "laboring people," to the world of work and its needs. It breaks down to some extent the wall that has shut out the world from the schools. They have been valuable, if at all, "not by what they found out," but "by the light that came from being interested" in the obvious. They are a very costly way of introducing neighbors who should need no introductions. These surveys gather no new or essential facts on Industrial Education. They only pick them up from nearby files or carry them from town to town. A Vocational School Board directly representative of the occupations would be hindered by such as have been most talked about.

It is earnestly submitted that every community knows itself essentially, its industries, and the need of training therein. There should be no more surveys to disclose general conditions, but only the immediate study and deliberation of the city fathers and other representative local people, together with experienced Vocational School men who have done the things



STATE OF WISCONSIN CONFERENCE BOARD ON INDUSTRIAL EDUCATION

The purpose of this Conference Board is to avoid duplication, promote co-ordination, and insure inclusive action. It is for the consideration of related interests at their points of contact in industrial education for the State.

It is not open to the other great activities delegated particularly to the several institutions represented.

wanted in other cities and can therefore directly and unassumingly help the local authorities to come readily to decisions which they can but believe from their own independent thinking are right and vital.

Huge volumes of surveys have been printed. We have yet to see one on Industrial Education that has not quickly gone upon a back shelf partly because it left off about where it might have begun, and was weighted down by the educationally obvious.

A State Conference Board

Co-ordination of Pnblic Activities

Much as local schools and industries may be co-ordinated, state agencies may well co-ordinate more or less informally upon any problem upon which they severally touch. They all serve one great and good master, the State. In that service everything should be done and nothing overdone.

The state agencies indicated in the chart on page 16 annually spend and disburse as state aid, approximately the following sums:

Industrial Commission		$115,000.00
University Extension in carrying higher education out to the people through itinerant teachers and correspondence courses		225,000.00
Department of Public Instruction:		
Expense	$72,000.00	
State Aid	2,220,000.00	
		2,292,000.00
Stout Institute for training vocational teachers		140,000.00
State Board of Industrial Education, State Aid		150,000.00
		$2,922,000 00

It is evident that each of these bodies may perfectly perform its major operations and yet materially further the public interests by carefully planning with the other bodies upon a subject that affects all more or less. The establishment of this point of contact upon invitation of the State Board of Industrial Education would seem to indicate that the latter board which was once criticised as "separate" and likely to be inconsiderate of other interests because it is by statute directly representative of industry and labor as well as of education, is in fact and because of its representative character, inclined to advise itself and be helped as far as possible in all ways.

Your Committee congratulates the Association. It foresaw upon mature investigation what are the substantial, underlying needs and methods for the education in the employments and in citizenship of the vast majority of the people to the end that those better aspirations may be fulfilled which are

cherished by all of whatever station or condition; that good wages may be well earned and wealth diffused; that as a nation we may sell more of skill and art and less of brawn and raw material; and that that better understanding may prevail that comes of skill and training in co-operative endeavor. Our platform of three years ago brought much opposition. Today all are standing on it with us.

We have presented the following resolutions to the Resolutions Committee of the Convention, with recommendations for their adoption:

RESOLVED: That the National Association of Manufacturers hereby reaffirms its former resolutions in respect to Industrial Education.

FEDERAL AID

As respects Federal aid for Vocational Education the National Association of Manufacturers recommends as follows:

I. Liberal Federal appropriations for the promotion of Vocational Education in the United States.

II. That Federal appropriations be allotted among the States upon a uniform basis and bear a uniform relation to appropriations made by the states for like purposes.

III. The creation of a Federal Board of Vocational Education representative of the interests vitally concerned, manufacturing, commerce, labor, and agriculture. The Commissioner of Education to be a member ex officio. The Board to elect one of its members chairman.

IV. That the Federal Board should be required to appoint advisory committees of five members each, representing industry, commerce, labor, agriculture, homemaking, and general or vocational education.

Respectfully submitted,

The Committee.

H. E. MILES, *Chairman,*
E. F. DU BRUL,
ALDUS C. HIGGINS,
H. M. LELAND,
J. W. MASON,
ROLLIN S. WOODRUFF.